

Atty. Dkt. No. 200311960-1REMARKS

Claims 1-27 were pending. Claims were 1-14 rejected. Claims 15-27 were allowed contingent upon overcoming objections to claims 17-20. By the above amendment, the Applicant has amended claims 1-14, and 17-20. The Applicant hereby requests further consideration and re-examination in view of the amendments made above and remarks set forth below.

Drawing Objection and Specification Amendment:

The Office Action objects to the drawings because reference numeral 712 of figure 7A is not mentioned in the description. Reference numeral 712 refers to a decision block of a flow chart, where the decision block asks the question "Improvement technique?" and gives decision choices of "Yes" and "No." The description discusses figures 7A, 7B, and 7C, which together form a single flow chart, starting at page 25, line 8, through page 27, line 7. In particular, the originally filed paragraph starting at page 25, line 21, discusses "fourth or fifth steps, 708 or 710," which refer to decision blocks for "Ranking technique?" and "Threshold technique?" respectively, that immediately precede the decision block referred to by reference numeral 712 in the flow chart. The next paragraph starting at page 25, line 25, discusses "a seventh step 714." The originally filed paragraph starting at page 26, line 16, discusses the improvement technique, which is chosen by a yes answer to the decision block 712. From this context, it can be seen that reference numeral 712 refers to "a sixth step 712" for choosing or not choosing "an improvement technique." Accordingly, the specification paragraphs starting at page 25, line 21, and page 26, line 16, have been amended by the above amendments to include reference numeral 712 referring to the improvement technique. Thus, reference numeral 712 is now found in the description and there is no need to amend figure 7A. No new matter has been added by these amendments.

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Specification Objections:

The Office Action objects to the originally filed title. By the above amendments, the title has been amended to replace "method" with "computer implemented method," which is descriptive of the claims as amended above and discussed below.

The Office Action objects to related applications section regarding reference to co-filed related applications that are referred to by attorney docket number. By the above amendments, the paragraph starting at page 1, line 4, has been amended to replace reference to the co-filed related applications with their application numbers.

The Office Action requests that reference to the figures in the description of the drawings and the detailed description replace the word "figure" with the abbreviation "Fig." No authority is cited for this request and Applicants can find no authority that requires this. Accordingly, Applicants respectfully decline to make such amendments.

Additional Specification Amendments:

The detailed description has been amended to correct typographical errors of a "second step 204" and a "third step 206" with a "third step 206" and a "fourth step 208," respectively. Comparing flow diagram blocks 206 and 208 of figure 2 with the originally filed paragraphs shows that the language of the paragraphs refers to these blocks, respectively. Also, a "second step 204" is discussed earlier in the application and block 206 is preceded by two blocks in figure 2.

The detailed description has been amended to correct a typographical error which misidentified a method as "method 600," when from the context the reference is clearly to "method 700."

No new matter has been added by these amendments.

Claim Objections:

The Office Action objects to claims 4 and 17 for a lack of antecedent basis for the phrase, "the cost." Claims 4 and 17 have been amended to replace "the cost" with "a cost," which corrects the antecedent basis problem.

The Office Action objects to claims 18-20 for a lack of antecedent basis for the phrase, "the subset." From the context, "the subset" in claim 18 refers to "the first

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subset." Accordingly, claim 18 has been amended to replace "the subset" with "the first subset." From the context, "the subset" in claims 19 and 20 refer to "the second subset." Accordingly, claims 19 and 20 have been amended to replace "the subset" with "the second subset."

**Claim Rejections:**

The Office Action rejects claims 1-14 as being directed to non-statutory subject matter under 35 U.S.C. § 101. In particular, the Office Action rejects claims 1-14 as being directed to an abstract method.

Claims 1-14 have been amended to replace "method" with "computer implemented method." According to MPEP § 2106 in a section headed "Computer related processes limited to a practical application in the useful arts," a claim is limited to a practical application and thus allowable statutory subject matter, when the claimed method produces a concrete, tangible and useful result; i.e., the method recites a step or act of producing something that is concrete, tangible and useful. Here, claims 1-14 produce *lower and upper bounds for a minimum cost*, which are concrete, tangible, and useful. No new matter has been added by these amendments since originally filed claims 15-27, which are directed to computer readable memories, teach the computer implemented methods of claims 1-14. Accordingly, claims 1-14 are allowable and an early allowance would be greatly appreciated.

**Additional Claim Amendments:**

Claims 13 and 14 have been amended to correct a typographical error. In line 2 of each of claims 13 and 14, a semicolon follows the word "of" where a colon should appear. Claims 13 and 14 have been amended to replace the semicolon with a colon.

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Conclusion:

In view of the above, the Applicant submits that all of the pending claims are now allowable. Allowance at an early date would be greatly appreciated. Should any outstanding issues remain, the Examiner is encouraged to contact the undersigned at (408) 293-9000 so that any such issues can be expeditiously resolved.

Respectfully Submitted,

Dated: April 3, 2006

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